



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: 11 th January 2018	
Attendees: Mr I Inman (L B Hounslow) & Mr D Kalamantis (Thames Water).	
LB Hounslow Observation	Thames Water Action / Response
<p><u>Storm Water Storage Tanks (SWST)</u></p> <p>Tank 1A was empty but had sludge at the bottom end of the tank. Hoppers 1, 2 & 3 were all approx $< \frac{1}{4}$ full and needed draining down.</p> <p>Tank 1B was empty & clean. Hoppers 1, 2 & 3 were all drained down.</p> <p>Tank 2A was empty & clean. Hoppers 1, 2 & 3 were all drained down.</p> <p>Tank 2B was empty & clean. Hoppers 1, 2 & 3 were all approx $\frac{1}{2}$ full and needed draining down.</p> <p>Tank 3A was empty & clean. Hoppers 1, 2 & 3 were all approx $< \frac{1}{4}$ full and needed drained down.</p> <p>Tank 3B was empty but had sludge at the bottom end of the tank. Hopper 1 was empty, hoppers 2 & 3 were both approx $\frac{1}{4}$ full and needed draining down.</p> <p>Tanks 4A, 4B, 5A & 5B are covered and odour controlled.</p> <p>Tank 6A was empty & clean. Hoppers 1, 2 & 3 were all approx $\frac{1}{4}$ full and needed draining down.</p> <p>Tank 6B was empty & clean. Hoppers 1, 2 & 3 were all approx $< \frac{1}{4}$ full and needed draining down.</p>	

Tank 7A was empty & clean. Hoppers 1, 2 & 3 (shallow hoppers) were all drained down but clogged with grit.

Tank 7B was empty & clean. Hoppers 1, 2 & 3 (shallow hoppers) were drained down but hoppers 1 & 2 were clogged with grit.

Tank 8A was empty but had sludge at the top end of the tank. Hopper 1 was full and hoppers 2 & 3 were both $\frac{3}{4}$ full and needed draining down.

Tank 8B was empty but had grit across a lot of the surface area. Hoppers 1, 2 & 3 were all approx $<\frac{1}{4}$ full and needed draining down.

Storm Water Channel

The storm feed channel serving STW's 1A-8B was empty of effluent and only had a shallow level of water (<5%) along its entire length.

Odour Monitors

The odour readouts (H₂S) for all of the monitors, which were providing data at the time of inspection (approx 13:15).

Monitor 1	0.000	ppm
Monitor 2	0.004	ppm
Monitor 3	0.000	ppm
Monitor 4	0.004	ppm
Monitor 5	0.003	ppm
Monitor 6	0.003	ppm
Monitor 7	0.000	ppm
Monitor 8	0.003	ppm
Monitor 9	0.003	ppm
Monitor 10	0.003	ppm
Monitor 11	0.003	ppm
Monitor 12	-0.000	ppm
Monitor 13	0.004	ppm

Complaints

The Council received no complaints in the preceding week.

Odour Log (Thames) - Photocopies of log entries taken:

Thursday 4th January 2018

AM No spikes. No other issues.

PM No odour spikes. Foaming/spillage digester. Time Neil hosed down, anti-foam digesters.

Friday 5th January 2018

AM OM2 = 0.017 at 16:12-17:09. OM13 = 0.02 at 12:07-13:04.

PM No odour issues.

Saturday 6th January 2018

AM OM1-5 no spikes, 6-13 no spikes.

PM Monitor No: 9 spiked at 18:24 but <15 mins duration (max 0.016ppm). No other odour issues found or reported.

Sunday 7th January 2018

AM OM1-5 no spikes. OM9 = 0.019 at 17:26-17:40.

PM OM8 spiked to 0.016 at 16:23 to 16:53. OM4 spiked to 0.016 at 16:38 to 17:08. Check area round river crossing & round power house, no odour detected on arrival.

Monday 8th January 2018

AM No odour issues reported.

PM No odour issues.

Tuesday 9th January 2018

AM No odour issues, nothing showing on trends.

PM OM1-5 no spikes. OM6-13 no spikes.

Wednesday 10th January 2018

AM OM8 spiked at 13:40 to 0.017ppm less than 15 minutes.

PM NOTHING ON SHEET...BLANK?

Sludge Dip Records

Date	West PSTs 1	West PSTs 2	West PSTs 3	West Total	East PSTs	Grand Total
	All units in m ³					
OMP limit	500					
05/01/18	498	1466	970	2934	2266	5200
08/01/18	0	2859	1751	4610	4753	9393
10/01/18	1424	2860	1158	5442	5426	10868

There are no limits for the East Side Primary Settlement tanks as these are covered and odour controlled.

Thames is required by the terms of the abatement notice agreed in 2005 to notify LBH on the next working day of any such exceedance and notify LBH within three working days of any appropriate remedial measure taken within three days and which has been complied with in this instance

Imported Sludge

There have been 28 imports of sludge over the last week, each import containing 30m³ of sludge.

Sludge Screening House

The large roller shutter door of the Raw Sludge Screening building was closed at the time of the inspection.

Digesters

Digesters 1-4 are permanently out of use.

Digesters 5 & 6 were both in use but had a very wet seals that were bubbling off gas.

Digester 7 was in use but had a very wet seal that was bubbling off gas. It was noted that the bell height was very high and sludge was almost to the top of the coping stones.

Digesters 8 & 9 were both in use but had a very wet seals that were bubbling off gas.

Digester 10 was in use with a major sludge spillage occurring at the time of the inspection. Sludge was pouring over the top of the coping stones around the tank.

Digesters 11 & 12 were both in use but had very wet seals that were bubbling off gas.

Digester 13 is currently out of use.

Digester 14 was in use and had a good dry seal.

Digester 15 was in use but had a very wet seal that was bubbling off gas.

Digester 16 is currently out of use.

Digester 17, 18, 19 & 20 were in use but had very wet seals that were all bubbling off gas.

Automatic dosing of anti-foaming agent is now in use and TW advised that this is also applied manually at least twice a day to all operational digesters.

Return Activated Sludge Channel

The nearside RAS channel (which runs in the ground between FST's 61-64 & 65-67) was relatively free flowing but was clogged along one third of its length on the nearside with thick dry sludge at the time of the

inspection.

West side primary settlement tanks (PST)

Rectangular PSTs are now covered and odour controlled.

Circular PSTs 9, 10, 11 & 12 were all in operation at the time of the inspection, all had clean fat free surfaces.

GENERAL

Final Settlement Tanks East Side of Works

The 8 circular tanks previously used as PSTs are now being used as final tanks (71-78).

At the time of the inspection all tanks except 71 were in operation.

East Side Screen House

The screen house doors were closed at the time of the inspection.

Thames confirmed all screens are in operation but undergoing cleaning work.

Outside the building was an uncovered open bulk carrier that was approx ½ full of rag.

Skips

On the East side there was one open bulk carrier that was empty.

On the West side there was one 16yd skip that was empty.

Pasteurisation Plant

The pasteurisation plant was in service at the time of the inspection. The TW officer confirmed all 12 streams were running.

Section 106 agreement

There have been no breaches of the s106 agreement in the last week.

West Side Aeration Lanes (Old)

No issues appeared evident.

New Works (West Side)

The mixed liquor feed channel serving aeration lanes 24 & 25 (E Battery) was clogged with rag and other floating debris.

The surface of the aeration are much improved and are now free flowing again.

The sprinkler system for the aeration lanes was in use and all sprinklers appeared to be working at the time of the inspection.

New Inlet Works (West Side)

No issues appeared evident at the new inlet works.

Odour Control Unit (OCU) performance monitoring – 11/01/2018

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station outlet	0.00(av)	0.2	Yes
East OCU	0.00(av)	0.05	Yes
West inlet	0.00(av)	0.05	Yes
Sludge reception outlet	0.00(av)	0.8	Yes
Thickening plant outlet	0.00(av)	0.6	Yes
Pasteurisation plant outlet (OCU 12)	0.00(av)	0.5	Yes
Transfer PS outlet	0.00(av)	0.6	Yes
New West OCU 11 outlet	0.00(av)	0.6	Yes

# Jerome reading	
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